# How to Treat Humidifiers

Humidi-Treat and the NP Series are two solutions that Nu-Calgon offers to resolve common scale difficulties that develop in humidifiers.

Select the appropriate product for your humidifier based on system capacity:

- Use Humidi-Treat in humidifiers with a daily water capacity less than or equal to 25 gallons.
- Use the NP Series in humidifiers with a daily water capacity greater than 25 gallons.
  Please see reverse side for product information.

# Advantages of Treating Humidifiers with Humidi-Treat or the NP Series:

- Reduces scale accumulation
- Less frequent humidifier cleaning
- Helps maintain design capacity
- One cartridge lasts a full season
- Very economical

## **Application:**

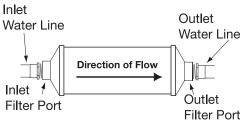
Evaporative power humidifiers using recirculated water or rotating evaporative surfaces are often troubled with loss of capacity and efficiency due to sticking solenoid valves and the buildup of lime scale deposits on evaporative surfaces. If unchecked, these problems can eventually cause the humidifier to stop operating.

Humidifier manufacturers recommend periodic inspection and, when necessary, removal of scale deposits through cleaning. However, the frequent cleaning necessary to maintain rated capacity can be very time consuming and costly. This inconvenience is often amplified in areas where the supply water has a particularly high content of dissolved solids. Alternatively, you can save time and resolve issues created by scale accumulation by implementing a preventative maintenance program by means of filtration with Nu-Calgon's Humidi-Treat or NP Series. Proper treatment, in combination with a bleed-off (a "draining-away" or periodic dump of reservoir water), reduces scale buildup and removes sediment to the point where they no longer constitute a major problem.

## Treating Smaller Humidifiers with Humidi-Treat:

For humidifier systems using up to 25 gallons of water per day, scale inhibition can be accomplished by installing Humidi-Treat on the water line that supplies water directly to the humidifier. Before each heating season, clean the pad or install a new pad before installing Humidi-Treat.







Product Number: 4190-02



1/4 inch John Guest fittings

### **Humidi-Treat Installation Steps:**

- 1. Shut off water.
- Disconnect existing filter or cut water line where filter is to be installed.
- Install water line directly into the John Guest fitting at each end of the Humidi-Treat cartridge.
   No additional fittings or tools necessary.
- 4. Insure proper direction of water flow and connect inlet and outlet.
- 5. Carefully turn on the water and check for leaks.
- 6. Check the filter after approximately 8 hours for slight leaks not visible during initial installation.



## Description of the NP Series:

The NP Series Housings are constructed of polypropylene plastic. The heads are tapped with FPT connections on the inlet and outlet and they are equipped with a pressure relief button to facilitate service. The NP24DD Housing has 3/8″ FPT connections while the NP48DD Housing has 1/2″ FPT connections. All are designed with "outside-in" directional flow of the water, resulting in more efficient filtering. Both are rated to 125 psi maximum pressure and 80°F maximum temperature. The NP24DD utilizes the "24" size cartridges while the NP48DD uses the "48" size. The housing comes equipped with a mounting bracket and the cartridge is packaged separately.

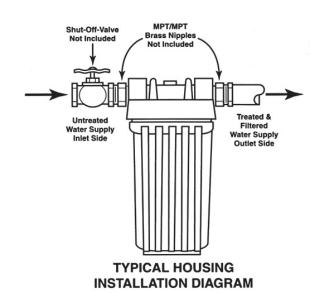
The NP48PS, NP246R, and NP486R Cartridges will remove sediment and inhibit lime scale formation. They include a polypropylene filter that effectively removes silt, dirt and sediment. In addition, the cartridges contain 6R Micromet, a NSF-certified scale inhibitor. This slowly soluble, food-grade polyphosphate dissolves slowly over time, providing a controlled level of scale-inhibiting phosphate. When properly sized, the NP Series will provide six months of treatment.

# Using the NP Series to Filter Humidifiers:

Use the Chart A to identify the appropriate filtration components of the NP Series for your humidifier based on daily capacity of water.

## **Installing the NP Series:**

- 1. Turn off water and electrical power to humidifier.
- Follow cleaning instructions provided by unit manufacturer. If none are available, Liquid Ice Machine Cleaner from Nu-Calgon can be used for removing the lime scale deposits from humidifiers. Thoroughly rinse all cleaned parts with fresh water.
- 3. It is recommended that you install a shut-off-valve on the water supply line as shown in the diagram. A second shut-off-valve connected on the outlet side of the housing may be desirable on some installations to prevent back flow of water when changing cartridges.
- 4. Select point of installation so that the housing's mounting bracket can be properly utilized; the installation should be selected so that the bracket can be mounted to a wall or wall stud.
- Connect housing's inlet port to shut-off-valve and the outlet port to water line with 3/8" or 1/2" MPT nipples (not included). Use the 3/8" MPT nipples for the NP24DD Housing or the 1/2" MPT nipples for the NP48DD Housing.
- 6. Mount the bracket to wall stud or other permanent surface and attach housing head to bracket using the four pointed screws.
- 7. Remove plastic wrap and insert the cartridge into housing bowl.
- 8. Screw housing bowl onto the housing cap and hand tighten. (No need to use tools for tightening).



#### Chart A

Daily Capacity of Water	NP Housing	NP Cartridge
Up to 60 gallons	NP48DD (Part # 4714-24)	NP48PS (Part # 4717-87)
Up to 100 gallons	NP24DD (Part # 4704-24)	NP246R (Part # 4705-87)
Up to 200 gallons	NP48DD (Part # 4714-24)	NP486R (Part # 4715-87)

## **System Test:**

- Open inlet side of shut-off-valve and allow water to flow through the filtration system.
- 2. Check for leaks.
- 3. Make note of date or mark the date of installation on housing in order to replace the cartridge every six months.

#### **NP Cartridge Replacement:**

- 1. Shut off water supply at the valve.
- 2. Press red pressure relief button to release pressure.
- With pressure fully released, unscrew body. Body wrenches are available as a replacement part although it should not be necessary if body was hand-tightened at last service.
- 4. Dump out water, discard old cartridge and insert a new cartridge after removing plastic wrap.
- 5. Inspect the housing body "O" ring. If necessary, lubricate very lightly with petroleum jelly.
- 6. Insert body into head and screw together hand tight.
- 7. Open water supply valve and check for leaks.



